



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,148	11/21/2003	Shiro Kawamoto	35703	2109
116	7590	05/02/2005	EXAMINER	
PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108			ALI, HYDER	
			ART UNIT	PAPER NUMBER
			3747	

DATE MAILED: 05/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/719,148	KAWAMOTO, SHIRO	
	Examiner	Art Unit	
	HYDER ALI	3747	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 14-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 1. Claims 1 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Haberlein et al (US 6,109,251).**

As to Claim 1, Haberlein et al discloses a four stroke engine comprising: a crankcase 2; an oil reservoir 17 located within the crankcase 2; and means for vibrating 3,5 the crankcase 2 to mist oil from the oil reservoir 17 to lubricate engine component. See column 2, lines 65-67; and column 3; line 1.

As to Claim 19, Haberlein et al discloses a four-stroke engine comprising: a crankcase 2; an oil reservoir 17 located within the crankcase 2; and means for 3,5 misting oil in the oil reservoir 17 via engagement of the oil with the crankcase 2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 2. Claims 2,3,17,18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haberlein et al (US 6,109,251).**

Art Unit: 3747

Haberlein et al discloses all the limitations as cited above except the means for vibrating the crankcase includes the crankcase having a wall thickness of about 1.5 mm and/or less than 1.5mm as claimed in claims 2,3,17,18.

It would have been obvious matter of design choice for one of ordinary skill in the art to modify Haberlein et al by employing the means for vibrating the crankcase includes the crankcase having a wall thickness of about 1.5 mm and/or less than 1.5mm in lieu of conventional crankcase having a wall thickness of about 2.5mm as shown in Haberlein et al patent, because applicant has not disclosed that the means for vibrating the crankcase includes the crankcase having a wall thickness of about 1.5 mm and/or less than 1.5mm would solve specific problem. Further, the means for vibrating the crankcase includes the crankcase having a wall thickness of about 1.5 mm and/or less than 1.5mm would vibrate the crankcase the same way as conventional crankcase having a wall thickness of about 2.5mm.

3. Claims 4,5,7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haberlein et al (US 6,109,251) in view of Okuda et al (US 6,273,049).

Haberlein et al discloses the limitation as sets forth in claim 1.

Haberlein et al does not disclose the means for vibrating the crankcase includes a vibration mechanism coupled to a portion of the crankcase as claimed in claim 4.

Okuda et al discloses a vibration plate 61 coupled to the crankcase 50. See FIG. 10, column 7, lines 21-25.

It would have been obvious to a person having ordinary skill in the art to modify Haberlein et al by employing a vibration plate 61 coupled to the crankcase 50 as taught

Art Unit: 3747

by Okuda et al in order to vibrate the crankcase of Haberlein et al patent using vibration plate.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haberlein et al (US 6,109,251) in view of Okuda et al (US 6,273,049).

The combine references of Haberlein et al in view of Okuda et al show all the limitations as cited above except the vibration mechanism is a vibration spring.

It would have been obvious matter of design choice for one of ordinary skill in the art to modify Haberlein et al in view of Okuda et al by employing the vibration spring in lieu of vibration plate, because applicant has not disclosed that the vibration spring would solve specific problem. Further, the vibration spring would vibrate the crankcase the same way as the vibration plate.

5. Claims 8-11,14,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haberlein et al (US 6,109,251) in view of Tamba et al (US 4,762,098).

Haberlein et al discloses the limitation as sets forth in claim 1.

Haberlein et al does not disclose a clearance area located in the crankcase is less than 10 mm and/or about 1.5 mm.

Tamba et al discloses counterweight 29 stir lubricating oil in the crankcase 28 because the clearance in the crankcase is less than 10 mm and/or about 1.5 mm.

It would have been obvious to a person having ordinary skill in the art to modify Haberlein et al by employing counterweight 29 stir lubricating oil in the crankcase 28 because the clearance in the crankcase is less than 10 mm and/or about 1.5 mm as taught by Tamba et al in order to facilitate splashing of the oil against a counterweight.

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haberlein et al (US 6,109,251) in view of Tamba et al (US 4,762,098) as applied to claims 11,14,15 above, and further in view of Okuda et al (US 6,273,049).

The combine references of Haberlein et al in view of Tamba et al show all the limitations as cited above except a vibration mechanism coupled to the crankcase to amplify the ripple.

Okuda et al discloses a vibration plate 61 coupled to the crankcase 50. See FIG. 10, column 7, lines 21-25.

It would have been obvious to a person having ordinary skill in the art to further modify Haberlein et al in view of Tamba et al by employing a vibration plate 61 coupled to the crankcase 50 as taught by Okuda et al in order to vibrate the crankcase of Haberlein et al patent using vibration plate.

Response to Arguments

Applicant's arguments with respect to claims 1-11 and 14-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HYDER ALI whose telephone number is (571) 272-4836. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HENRY YUEN can be reached on (571) 272-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3747

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ha



Henry C. Yuen
Supervisory Patent Examiner
Group 3700